

RECEIVED

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

DEC 23 1993

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Amendment of Parts 15 and 90 )  
of the Commission's Rules to ) ET Docket No. 93-235  
Provide Additional Frequencies )  
for Cordless Telephones )

REPLY COMMENTS

American Telephone and Telegraph Company ("AT&T") respectfully submits the following Reply Comments in response to the Commission's Notice of Proposed Rulemaking ("NPRM"), FCC 93-422, released September 17, 1993.

The NPRM proposed to allocate 30 new frequencies (15 duplex channels) for use by cordless telephones on a shared basis with the presently authorized primary use of these frequencies by particular Private Land Mobile Radio Services. The fifteen comments<sup>1</sup> raise only two significant issues:<sup>2</sup> whether the cordless telephone handset

<sup>1</sup> The Appendix lists those comments and the abbreviations used in these Reply Comments to identify them.

<sup>2</sup> The cordless telephone interests, of course, support the proposal in the NPRM. AT&T, Cobra, NAFTC, Radio Shack, TIA, Uniden. Cobra's position (p. 4) that the new rules should be effective six to twelve months after publication in the Federal Register to permit orderly disposition of old inventory, rather than 30 days as proposed in the NPRM, is not supported by any other commenter. There is no reason to limit the ability of the public to benefit from this additional capacity as soon as manufacturers choose to offer it.

transmitters using the 15 frequencies allocated to them will interfere with the primary usage by the Petroleum Radio Service and the Forest Products Radio Service and whether cordless telephone base transmitters using the 15 frequencies assigned to them will interfere with nearby television sets and VCRs.<sup>3</sup> There is no basis for either of those concerns.

The claim of API, FIT and UTC that cordless telephones can impair the communications of their constituents lacks merit. As API recognizes, the automatic channel selection mechanism required by the proposed rule means that the cordless telephone will not establish a link on an occupied frequency.<sup>4</sup> There is no substantial possibility that a cordless telephone (transmitting at about 25 microwatts) which has accessed a vacant channel will then impair communications on that channel between a PLMRS base station operating at 100-300 watts and a PLMRS mobile station operating at 25-30 watts. Such impairment would

---

<sup>3</sup> Those 15 frequencies are allocated on a primary basis to the Motor Carrier Radio Service. The motor carrier interests did not comment in this proceeding; apparently, they have no objection to sharing with cordless telephones.

<sup>4</sup> While AT&T proposed that applications for equipment authorization contain merely an attestation of compliance with this requirement, the Commission may prefer the proposal of TIA (p. 4) and Uniden (p. 4) to require a simple description of how compliance is achieved.

exist only if the mobile were very far from the base station and very near the cordless telephone. A PLMRS system expected to communicate with mobile units so far from the base transmitter as to be subject to interference from cordless telephones is not the reliable system for which these commenters claim their public responsibilities call.<sup>5</sup>

The claim that cordless telephones will interfere with PLMRS usage is belied by the recognition by all three of these commenters that a PLMRS communication will interrupt a cordless telephone conversation on the same frequency, rather than vice versa. These commenters do not, however, negate the point that the 30 proposed frequencies are nevertheless suitable for cordless telephones. The evidence provided by API and FIT that more PLMRS mobile units use some of the relevant frequencies in or near urban areas than the Commission may have recognized does not

---

<sup>5</sup> API's claim (pp. 10-11) that "audible and subaudible tones" emitted by cordless telephones could seize PLMRS transmitters and retransmit cordless telephone conversations is groundless. Because cordless telephones using the new frequencies must use digital security coding (§ 15.214(d), 47 CFR § 15.214(d)), there is no need for them to use guard tones for signaling.

UTC's claim (p. 4) that a cordless telephone transmitter that drifts off frequency can cause interference up to a mile away is without merit. Such off-frequency drift does not increase the distance at which the extremely low powered cordless telephone can interfere with much higher powered PLMRS usage.

resolve this issue. The proposed rules allocate 15 frequencies to cordless telephone handset transmitters. Oil or forest company usage of some of these frequencies at times in any given area simply means that the new cordless telephones will not be able to use all 15 of the new channels everywhere all of the time. There has been no demonstration of substantial PLMRS usage of a significant number of the 15 channels, much less all of them, in urban areas, and particularly at night, where and when cordless telephone usage is highest.<sup>6</sup> Thus, despite some PLMRS usage of some frequencies in some places at some times, the proposal in the NPRM affords cordless telephones significant relief from the congestion on the present ten channels.

The fear expressed by MSTV/PBS and Zenith that the cordless telephone base transmitter will interfere with television reception is equally groundless. While those commenters presented no factual support for their concern, evidence to the contrary was supplied by other commenters with interests in television set manufacture. EIA/CEG (p. 2) and Thomson (p. 2) report test results showing that the potential for such interference is negligible except where the cordless telephone is quite close to the

---

<sup>6</sup> By way of example, Appendix I to API's Comments shows none of the 15 cordless telephone handset frequencies in use in the District of Columbia, and only five anywhere in each of New Jersey and New York State.

television set. AT&T has no objection to the proposal of EIA/CEG and Thomson that the Commission require cordless telephone instruction manuals to contain a cautionary note advising the user to move the cordless telephone base away from the TV or VCR if interference is experienced.<sup>7</sup> The additional warnings about the potential for interference to cordless telephones from licensed services proposed by ARRL (p. 11) are unnecessary.<sup>8</sup> The Commission's rules already require a label informing the user that the device must accept interference (§ 15.19(a)(3), 47 CFR § 15.19(a)(3)) and encourage manufacturers to advise users how to resolve interference problems (§ 15.15(c), 47 CFR § 15.15(c)).

---

<sup>7</sup> AT&T agrees with these commenters that the Commission should not specify the exact wording of this advice.

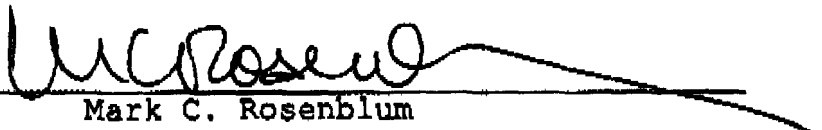
<sup>8</sup> ARRL does not oppose allocating the additional frequencies to cordless telephones.

CONCLUSION

The Commission should adopt the proposal in the  
NPRM.

Respectfully Submitted,

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

By   
Mark C. Rosenblum  
Kathleen F. Carroll  
Ernest A. Gleit

Its Attorneys

Room 3244J1  
295 North Maple Avenue  
Basking Ridge, New Jersey 07920

Dated: December 23, 1993

## APPENDIX

The American Petroleum Institute - API

American Radio Relay League, Inc. - ARRL

American Telephone and Telegraph Company - AT&T

Association for Maximum Service Television, Inc. and Public  
Broadcasting Service - MSTV/PBS

Cobra Electronics Corporation - Cobra

Consumer Electronics Group of the Electronics Industries  
Association - EIA/CEG

Forest Industries Telecommunications - FIT

North American Foreign Trading Corporation - NAFTC

Radio Shack, a Division of Tandy Corporation - Radio Shack

Telecommunications Industry Association, Mobile & Personal  
Communications Consumer Radio Section - TIA

John C. Thomas

Thomson Consumer Electronics, Inc. - Thomson

Uniden America Corporation - Uniden

Utilities Telecommunications Council - UTC

Zenith Electronics Corporation - Zenith

CERTIFICATE OF SERVICE

I, Geraldine A. Gowers, do hereby certify that on this 23rd day of December, 1993, a copy of AT&T's Reply Comments has been served by first class mail, postage prepaid, upon the parties listed below:

Wayne V. Black  
Joseph M. Sandri, Jr.  
Keller and Heckman  
1001 G Street, NW  
Washington, DC 20001  
Attorneys for the American  
Petroleum Institute

Christopher D. Imlay  
Booth, Freret & Imlay  
1233 20th Street, NW  
Suite 204  
Washington, DC 20036  
Attorneys for The American  
Radio Relay League, Incorporated

Gregory M. Schmidt  
Ronald J. Krotoszynski, Jr.  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Post Office Box 7566  
Washington, DC 20036  
Attorneys for Association for  
Maximum Service Television, Inc.

Max Rogers  
Chief Engineer  
Cobra Electronics Corporation  
6460 W. Cortland  
Chicago, IL 60635

Barbara N. McLennan  
George A. Hanover  
Consumer Electronics Group,  
Electronic Industries Association  
2001 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006



James H. Baker  
Executive Vice President  
Forest Industries Telecommunications  
871 Country Club Road, Suite A  
Eugene, OR 97401-2200

Charles H. Helein  
Julia A. Waysdorf  
Helein, Waysdorf & Mandigo  
1850 M Street, NW, Suite 550  
Washington, DC 20036  
Attorneys for North American Foreign  
Trading Corporation

Paula A. Jameson  
Senior Vice President,  
General Counsel, and Corporate  
Secretary  
Gregory Ferenbach  
Assistant General Counsel  
Public Broadcasting Service  
1320 Braddock Place  
Alexandria, Virginia 22314

Jessie M. Slayton  
Manager, Regulatory Affairs  
Radio Shack  
A Division of Tandy Corporation  
1400 One Tandy Center  
Ft. Worth, TX 76102

Jay E. Padgett  
Louis Mecseri  
Eric J. Schimmel  
Telecommunications Industry Association  
Suite 800  
2001 Pennsylvania Avenue, N.W.  
Washington, DC 20006

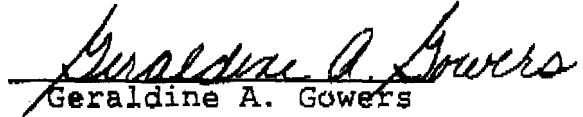
John C. Thomas  
7911 Dartworth Drive  
Parma, Ohio 44129-3929

Wray Hiser  
Thomson Consumer Electronics, Inc.  
Suite 601  
1200 19th Street, N.W.  
Washington, DC 20036

James R. Haynes  
Chief Engineer  
Uniden America Corporation  
8707 North by Northeast Blvd.  
Fishers, Indiana 46038

Jeffrey L. Sheldon  
Sean A. Stokes  
Utilities Telecommunications Council  
1140 Connecticut Avenue, NW  
Suite 1140  
Washington, DC 20036

Stephen Sigman  
VP Consumer Affairs  
Zenith Electronics Corporation  
1000 Milwaukee Avenue  
Glenview, IL 60025

  
Geraldine A. Gowers

Date: December 23, 1993